INTERNATIONAL SEARCH REPORT

International application No. PCT/KR2004/000789

A.	CLASSIFICATION	OF	SUBJECT	NA A TENTEN
		OI.	SOPPECI	MATTER

IPC7 B60R 11/02

According to International Patent Classification (IPC) or to both national classification and IPC

FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols) IPC A47B 88/00 B60K 37/02 B60R 11/02 G02F 1/1333 G09G 3/36

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched Korean Patents and applications for inventions since 1975.

Electronic data base consulted during the intertnational search (name of data base and, where practicable, search terms used)

DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No
Α	JP 2000-119650 A (ALPINE ELECTRONICS, INC.) 31 OCTOBER 2001 See the all document	1, 6
A	US 5847685 A (ALPINE ELECTRONICS, INC.) 08 DECEMBER 1998 See the all document	1, 6
A	US 5362144 A (PIONEER ELECTRONIC CORPORATION) 08 NOVEMBER 1994 See the all document	1, 6
A	EP 0338405 A3 (HITACHI LTD, HITACHI AUTOMOTIVE ENG) 25 OCTOBER 1989 See the all document	1, 6
A	EP 0409232 A3 (KABUSHIKI KAISHA TOSHIBA) 23 JANUARY 1991 See the all document	1, 6
A	KR 2000-0067019 A (HYUNDAI AUTONET CO LTD) 15 NOVEMBER 2000 See the all document	1

	Further	documents are	listed in	n the c	ontinuation of Box	C.
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 \mathbf{x} See patent family annex.

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Date of mailing of the international search report

Date of the actual completion of the international search

27 JULY 2004 (27.07.2004) 28 JULY 2004 (28.07.2004)

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Patent document cited in search report	Publication date	Patent family member(s)	Publication date
JP 2000-119650 A	31.10.2001	US 6731350 B2	04.05.2004
US 5847685 A	08.12.98	JP 4-242713 JP 4-242714	19.08.92 19.08.92
US 5362144 A	08.11.94	JP 4-019518 JP 4-019519 JP 4-023199 JP 4-023200	08.01.92 08.01.92 13.01.92 13.01.92
EP 0338405 A3	25.10.89	US 4983951 A	08.01.91
EP 0409232 A3	23.01.91	NONE	
KR 2000-0067019 A	15.11.2000	NONE	

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